Templates Exercises

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Writing a template

- Write a template function which takes two arguments of a generic type and returns the greater of the two arguments
- Write a program which calls your function and passes arguments of type double
- Write out the code for the function which is instantiated by the compiler

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Templates and Code Organization

- The normal practice is to put function declarations into a header file, which is included by any source code files which call those functions. The full function definition is put in a separate source code file
- Does this method of code organization work with template functions?

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Class Template

- Write down the definition of a template class whose members are
  - A member called "data", which has the same type as the template parameter
  - A constructor which initializes "data" from an argument of the same type

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Class Template

- Write down code to create an instance of this class with std::string as the parameter and the string "Hello" as the initial value of the member
- Write out the class definition generated by the compiler for this instantiation

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